

WHAT I CLAIMED IS:

1. A method of mounting flip-chip for lowering the on-resistance of power transistor in the protection circuit of rechargeable battery, which comprises a power field effect transistor and a protection IC, has the following steps:

Serially connect drain metal contacts of two transistors to form a chip cell during fabrication of wafer;

Use welding torch to point weld the metal wire on contact of each chip cell, so that the source and gate contacts will form welding metal bumps respectively;

Cut the wafer to form bare chip cells of two serially connected gate electrodes;

Stain said chip cell with tin so that said welding metal bumps on contacts are attached with tin balls;

Apply plastic material to positioned points of printed circuit board; use flip-chip technology to make drain of a bare chip cell face upward, so that said tin balls are aligned with the positioned points of printed circuit board; and

Passing through an oven for heating and pressuring, so that said tin balls will fuse and said plastic material will be hardened and soldered together with contacts on the printed circuit board.

2. The method of mounting flip-chip for lowering the on-resistance of power transistor in the protection circuit of rechargeable battery according to claim 1, wherein gate electrode of the bare chip cell is oppositely arranged with respect to the contacts on output ends of logic circuit on the printed circuit board, and source electrode at one end is connected to the contact on the negative pole of a battery and source electrode at the other end is connected to the contact on the negative pole of a power supply and form into electric connection.